

# TRENDS

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## New Partners for Women's Health Program seeks to educate participants

In October 1997, the State Health Plan (SHP) and Merck-Medco Managed Care (the Plan's pharmacy benefits manager) began offering the new Partners for Women's Health Program to SHP female insureds ages 40 through 59.

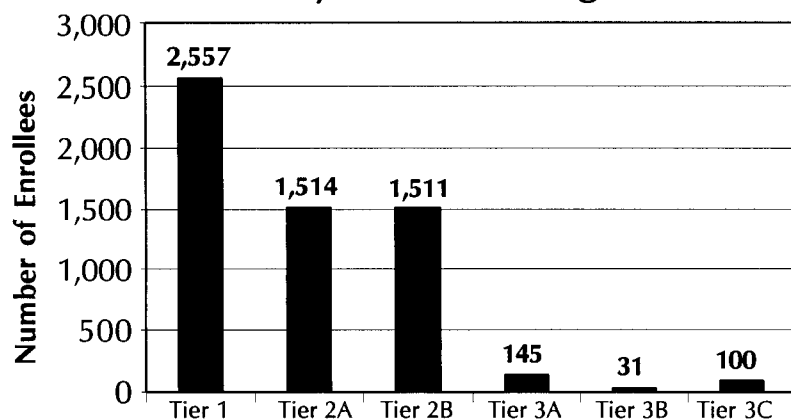
To enroll in the program, eligible women were asked to complete the Women's Health Profile Questionnaire.

In response to their Health Profiles, participants in the program received personal risk reports for

heart disease, osteoporosis and breast cancer. They also continue to receive educational materials and newsletters. Additionally, participants have access to the program's toll-free line staffed with specially trained health care counselors to answer questions about menopause.

No information that identifies participants by name is released to their employers or the Office of Insurance Services (OIS). General summary data, however, were given to OIS as a report on the activity within the program.

**Women's Health Program:  
Enrollees by Risk Tier Assignment**



Tier 1=Low Risk

Tier 2=Cardiovascular OR Osteoporosis Risk

Tier 3=Cardiovascular AND Osteoporosis Risk

A= Treated for Both Risks

B= Untreated

C= Treated for One Risk

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### Enrollment Figures

On October 1, Merck-Medco mailed 66,060 Enrollment Invitation Packages to women eligible for the program. Of that number, 9.4 percent (6,182) joined by the end of the enrollment period.

The Call Center's toll-free phone line support began October 2; however, as of November 15, total enrollees numbered just 3,300. The feedback reported by the Call Center involved "confidentiality concerns"--perhaps explaining the low response rate.

On November 20, in an effort to answer these concerns, OIS mailed a memo further explaining the program. This mailing also included a magnet with toll-free number to encourage use of Call Center.

Shortly thereafter, the Call  
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## Women's Health

### Continued from Page 1

Center received a record number of program-related calls--303 in a one-week period. Of these calls, 95 percent were calls to enroll.

### Risk Assessment

At the end of the enrollment period on February 2, participants were categorized into three tiers.

*Tier 1, or Low Risk*, had 41.7 percent. *Tier 2, or At Risk for Cardiovascular (CVD) or Osteoporosis*, had 49.3 percent. Of these people, 24.7 percent reported they had been treated; 24.6 percent reported they were untreated. *Tier 3, or At Risk for Both CVD and Osteoporosis*, had 8.9 percent. Of these people, 2.4 percent were

treated for both risks, 4.9 percent were untreated and 1.6 percent were treated for one risk.

### Descriptive Data

The largest age bracket within the program was the 45-49 group.

Noting that all descriptive data (except for age) were self-reported via the Women's Health Profile, the mean weight for the Menopause Program participants was 160.7 pounds; the mean height was five feet, three inches.

Of the enrollees, 75 percent were married, and 64 percent were college educated (34 percent with graduate degrees). The group was composed of 78 percent Caucasian women and 19 percent African-American women.

### Self-Reported Clinical Data

Looking at the self-reported clinical data, 33.7 percent of the women reported having had a hysterectomy--the mean age reported for this procedure was 38 years. Of the program population, 18.4 percent

reported high blood pressure, and 29.7 percent reported high cholesterol.

Of the participants, 54.9 percent reported they are post-menopausal. Forty-seven percent of those in the program reported

having taken estrogen or female hormones--with 78 percent of these individuals still on therapy.

Regarding their sense of well-being, 33.9 percent of the participants reported often feeling down, depressed or helpless. Additionally, 30.3 percent of enrollees reported "often being bothered by little interest or pleasure in doing things."

Looking at the summary data on self-reported lifestyle/diet, 34.9 percent of participants reported a history of smoking at

least 100 cigarettes in their lifetime--with 22.4 percent of participants reporting they currently smoke.

Thirty percent of the women described their diets as low in calcium, a risk factor for osteoporosis. Conversely, 30 percent (not necessarily the same women) reported taking calcium supplements.

Examining the self-reported aerobic exercise information (exercise with a primarily *cardiovascular* benefit), 28 percent reported having no aerobic exercise weekly, 41 percent reported aerobic exercise at one to two times per week and 31 percent reported aerobic exercise three or more

## Health Profile: Self-Reported Medical History

### CONDITION OR DISEASE

### % REPORTING

Anemia (Low Blood Count) .....	28.7%
Arthritis .....	27.6%
Pneumonia .....	16.6%
Thyroid Disease .....	12.3%
Peptic, Stomach or Duodenal Ulcer .....	10.3%
Chronic Bronchitis or Emphysema .....	6.4%
Blood Clots (Legs/Lungs) .....	3.4%
Heart Attack or Angina .....	3.1%
Breast Cancer .....	2.4%
Kidney Disease or Failure .....	1.7%
Cervical Cancer .....	1.5%
Uterine/Endometrial Cancer .....	1.4%
Stroke or "Mini-Stroke" .....	1.1%
Liver Disease .....	0.4%
Ovarian Cancer .....	0.2%

In response to the following closed-ended question, "Has a doctor ever told you that you have...?" Women's Health Program participants reported experiencing the above conditions.

reported having an oophorectomy (ovary removal). Of these women, 35.2 percent reported a single oophorectomy; 61.4 percent reported a double oophorectomy.

Regarding child-birth experience, 16.8 percent of the women in the study reported having had at least one Cesarean-section delivery.

Looking at family history, 17.0 percent of the participants reported one or more women in their family (mother and/or sister) as having had breast cancer. Almost three percent of women reported having experienced a broken bone after age 50, while 5.4 percent reported a maternal history of hip fracture.

Regarding cardiovascular issues, 29.2 percent of the participants self-

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# Provider Networks successfully serve State Health Plan

In 1997, State Health Plan charges adjudicated through the Plan's network arrangements equaled \$612.1 million, with total reimbursement for these charges equaling \$502.2 million, or 82.0 percent of charges. Reimbursement included both Plan payment and patient liability in the form of deductibles and coinsurance.

## Physician Network

Within the State Health Plan Physician Network, established on January 1, 1993, participating physicians agree to accept the Plan's allowable charges for covered medical services.

When charges incurred in non-network specialties and outside of the network area are included, Plan professional charges during 1997 totaled \$227.3 million. Of this amount, \$180.3 million (79.3 percent) fell within the Plan allowance.

Of the \$216.0 million in professional charges paid in 1997 in the *state network area* (South Carolina and Augusta, Georgia), \$209.3 million, or 96.9 percent, was attributable to network providers. This number compares to the 96.0 percent of professional charges paid in the network in

1996, the 95.0 percent paid in 1995, the 93.9 percent paid in 1994 and the 90.2 percent paid in 1993--the program's initial year.

Network participation varied from a high of 98.7 percent in the Greenwood area to a low of 88.2

were Orangeburg, Sumter and Beaufort.

The location in certain areas of large tertiary care facilities, such as those associated with medical schools, results in those areas providing a larger share of care

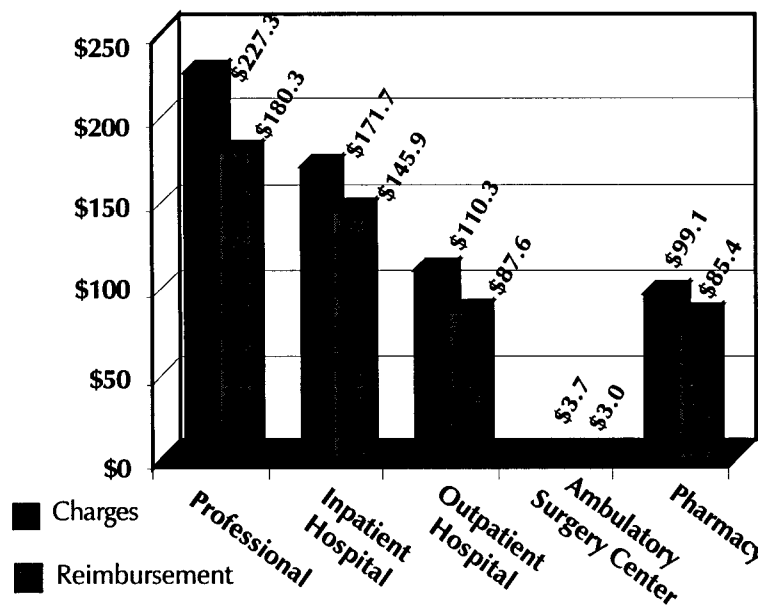
than their population represents. Of the 12 areas in the state, four accounted for a larger percentage of total professional services than total Plan population. Columbia, with 21.8 percent of Plan subscribers in 1997, accounted for 27.4 percent of professional charges. Charleston, with 14.5 percent of Plan subscribers, but 17.7 percent of professional charges, had the second largest difference. Other areas in this category were Greenville-Anderson and Aiken-Augusta.

The areas are

ordered differently when ranked according to reimbursement as a percentage of charges. Because the Plan's schedule of professional allowances is the same statewide (and in Augusta as well), the percentage of charges allowed can be viewed as a proxy for the relative price level of professional services in a given area.

The Orangeburg and Greenwood areas, with an 85.1 and 84.8 percentage of charges within the Plan allowance, respectively, appear from these statistics to be the least expensive regions of the state for

**1997 Charges, Reimbursement  
by Service Type in Millions of Dollars**  
(both Network and Non-Network)



percent in the Beaufort region.

This year, network participation increased in all areas except Florence, which remained at 97.6 percent from 1996 to 1997.

The Columbia area, which was the largest in terms of individuals enrolled in the State Health Plan, was again the largest in professional dollars. Professional charges adjudicated in 1997 that were incurred in Columbia and its surrounding area totaled \$59.1 million.

Following Columbia in dollar size were Charleston at \$38.1 million and Greenville-Anderson at \$32.2 million. The three smallest regions in terms of professional charge volume in 1997

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## SHP Networks

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professional services.

Those areas with the lowest percentage of charges allowed, and, by implication, the highest costs, are Spartanburg (78.0 percent of charges allowed), Columbia (77.5 percent) and Aiken-Augusta (75.1 percent). Statewide, 79.3 percent of these charges fell within Plan reimbursement allowances. That figure in 1996 equaled 81.3 percent.

Medical services represented the largest component of the \$227.3 million in professional services, with \$74.5 million in total charges. The Plan allowed 80.4 percent of these charges. Following medical were: surgery, at \$57.2 million; professional component for laboratory and X-ray, at \$20.1 million; lab services, at \$17.3 million; anesthesia, at \$13.8 million; diagnostic radiology, at \$12.3 million; physical medicine, at \$9.0 million; psychiatry, at \$6.3 million; and consultations, at \$6.3 million.

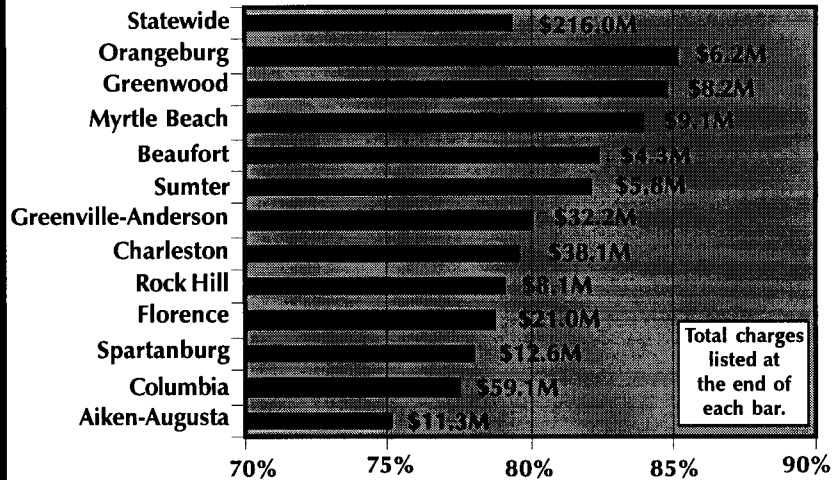
### Hospital Network

Through the State Health Plan Hospital Network, which was

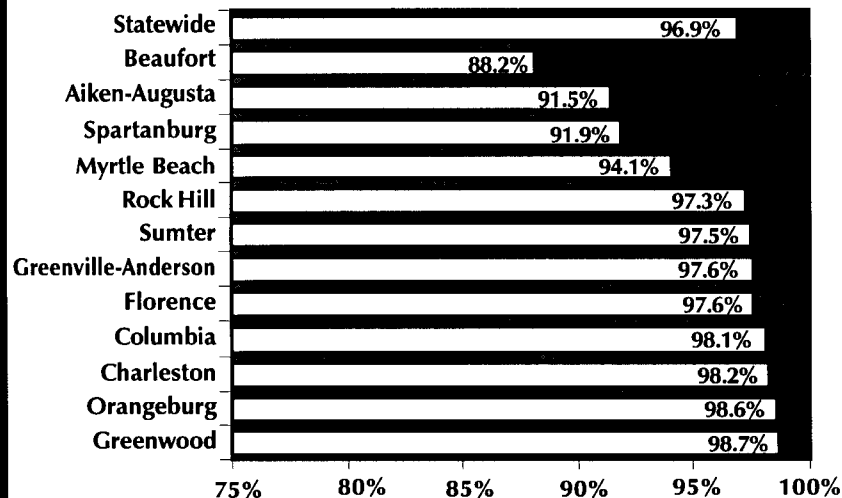
established in 1992, the Office of Insurance Services (OIS) created a prospective payment system for inpatient services. In 1994, this system was extended to include

the Plan's allowable amount as payment in full. All network area general hospitals have belonged to the hospital network since January 1992.

### 1997 Percentage Allowed of Professional Charges within the Plan Network Areas



### 1997 Percent of Professional Charges Paid in the Network by Area



facility charges incurred in an outpatient setting.

The hospital network includes facilities that have agreed to accept

charges. This reimbursement figure includes both actual Plan payment and patient liability

### Inpatient Admissions

In 1997, the State Health Plan was the primary payer for 19,141 inpatient hospital admissions. Total charges for these cases equaled \$171.7 million.

Although the DRG (diagnosis related groups) system was developed originally for just the inpatient sector, it is driven by the information included on hospital bills--which is the same for both outpatient and inpatient episodes.

Total reimbursement for admissions in 1997 equaled \$145.9 million, which was 85.0 percent of the total

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## SHP Networks

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(employee deductibles and coinsurance). Of the Plan total, 17,870 cases (93.4 percent) took place in network hospitals, comprising \$156.7 million in total charges. Facilities received \$133.0 million in reimbursement for these cases, 84.9 percent of charges. Another 57 cases were admitted at veterans, military or specialty hospitals located in-state.

Surgical admissions amounted to 6,553 out of the 19,141 inpatient cases in 1997, comprising \$93.9 million in charges and \$80.1 million (85.3 percent) in reimbursement. The remaining

12,588 admissions, which involved no surgical procedures, were classified as *medical* cases. These medical cases totaled \$77.8 million in charges and \$65.8 million (84.6 percent) in reimbursement.

In 1997, the number of admissions grew to 19,141--up from 19,043 in 1996. Charges rose to \$171.7 million from \$169.1 million a year earlier, and reimbursement fell to \$145.9 million from \$146.2 million. Average per-case charges increased 1.0 percent to \$8,970, and average per-case reimbursement dropped 0.7 percent

to \$7,622 in 1997. Because of differences in case mix between the years, this information does not provide a strictly accurate comparison of per unit cost inflation from one year to the next. The 85.0 percent of inpatient charges reimbursed represents a slight decrease from the 86.5

The MDCs with the highest cost per admission in 1997 were *Multiple Significant Trauma*, at an average charge of \$39,029 per case, and *HIV (Human Immunodeficiency Virus)*, at \$17,029 per case. There were only 39 admissions in *Multiple Significant*

*Trauma* and 43 admissions in *HIV*.

To get a good indication of movement among diagnostic categories, it is useful to look at the changes in overall share of charges. The largest increase in overall charge share was in the *Musculoskeletal* category (7.8 to 9.5 percent). The next largest jumps in

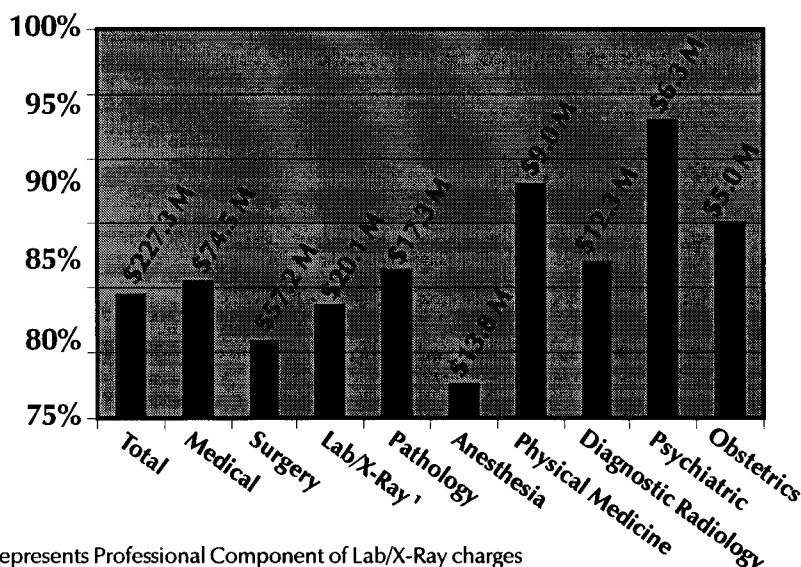
overall charge share were made by the *Respiratory* (9.0 to 10.5 percent) and *Circulatory* (20.4 to 21.6 percent) MDCs.

The largest decline in overall share in 1997 was in the *Newborns & Other Neonates* MDC (6.3 to 4.6 percent). The MDC with the next largest decline was *Mental Disorders* (3.3 to 2.3 percent).

In 1996, the largest jumps in overall charge share were made by *Circulatory* (19.6 to 20.4 percent) and *Respiratory* (8.4 to 9.0 percent). The largest declines in

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**1997 Percentage Allowed of Total Professional Charges by Type of Service**  
(Total Charges Listed at the End of Each Bar)



\* Represents Professional Component of Lab/X-Ray charges

percent of those charges paid in 1996.

*Pregnancy and Childbirth* led in the number of admissions among all major diagnostic categories (MDCs) in 1997, with 2,830 admissions. It was followed closely by *Newborns and Other Neonates* with 2,705. In terms of dollars, however, the *Circulatory* MDC far exceeded all others with \$37.1 million in charges and \$32.2 million in reimbursement for its 2,596 admissions. The *Respiratory* MDC was next highest with \$18.0 million in charges and \$15.1 million in reimbursement.

## SHP Networks

Continued from Page 5

1996 were in *Musculoskeletal* (9.0 to 7.8 percent) and *Kidney & Urinary Tract* (3.3 to 2.8 percent).

### Outpatient Episodes

Prior to 1994, the State Health Plan paid for services performed in the outpatient department of a hospital on the basis of billed, covered charges. Since 1994, the SHP has paid for these services using the same methodology as for inpatient services.

Looking at MDCs in the outpatient hospital setting for 1997 indicates that the leading MDC was *Musculoskeletal System* at \$18.6 million, which comprised 17.7 percent of the grouped charges.

The next highest outpatient hospital MDCs were *Digestive* at \$13.3 million (12.8 percent), *Circulatory* at \$11.6 million (11.1 percent) and *Skin & Subcutaneous Tissue* at \$9.4 million (9.0 percent).

### ASC Network

Services provided by Ambulatory Surgery Centers (ASCs) often duplicate those performed in hospitals' outpatient departments. In fact, the information included on ASC bills allows these cases to be grouped into DRGs as well.

On January 1, 1994, the State Health Plan created the ASC Network, offering contracts to all ambulatory surgery centers. Mem-

bers of the network agree to accept the Plan's DRG-based payment and not balance bill individuals insured by the Plan.

Ambulatory Surgery Centers represented a much smaller volume of SHP business than hospitals, with \$3.7 million in ASC charges in 1997. Of these charges, \$0.2 million were not grouped into a DRG. Of the grouped charges, \$2.5 million were related to a surgical case, while the remaining \$1.2 million were medical in nature.

*Musculoskeletal System* was the leading MDC, with \$0.9 million in charges (25.8 percent of

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## 1997 Share of Facility Charges by Major Diagnostic Category (Only Dollars That Were Grouped into a DRG<sup>1</sup> Are Included)

MDC <sup>2</sup>	Inpatient Hospital	Outpatient Hospital	ASC <sup>3</sup>
Nervous System	4.8%	5.7%	2.8%
Eye	0.2%	2.6%	15.0%
Ear, Nose, Mouth & Throat	1.0%	6.7%	14.2%
Respiratory	10.5%	3.6%	0.2%
Circulatory	21.6%	10.5%	0.3%
Digestive	8.3%	12.1%	15.1%
Hepatobiliary System/Pancreas	3.5%	4.7%	0.1%
Musculoskeletal System	9.5%	16.8%	24.4%
Skin & Subcutaneous Tissue	2.1%	8.5%	9.8%
Endocrine/Nutritional/Metabolic	2.1%	1.5%	0.3%
Kidney & Urinary Tract	2.7%	5.9%	3.1%
Male Reproductive System	0.7%	1.4%	0.9%
Female Reproductive System	7.1%	5.8%	7.0%
Pregnancy & Childbirth	7.4%	1.7%	0.3%
Newborns & Other Neonates	4.6%	0.0%	0.0%
Blood & Blood Forming Organs	1.2%	0.9%	0.4%
Myeloproliferative Disorders	2.3%	2.1%	0.2%
Infectious/Parasitic	2.0%	0.7%	0.0%
Mental Disorders	1.6%	0.4%	0.0%
Substance Use	0.5%	0.0%	0.0%
Injury, Poisoning, Toxicity	0.9%	1.0%	0.3%
Burns	0.1%	0.1%	0.1%
Other Health Factors	0.8%	2.0%	0.1%
Multiple Significant Trauma	0.9%	0.0%	0.0%
HIV Infection	0.4%	0.1%	0.0%

### 1997 Share of Facility Charges that Were Non-Grouped

Inpatient = 3.5%; Outpatient = 5.2%; ASC = 5.4%

<sup>1</sup>DRG = Diagnosis Related Group

<sup>2</sup>MDC = Major Diagnostic Category

<sup>3</sup>ASC = Ambulatory Surgery Center

## 1997 Dental Plan payments per subscriber decrease 0.4%

The average payment per State Dental Plan subscriber decreased 0.4 percent from \$197.35 in 1996 to \$196.54 in 1997.

This decrease in per capita payments seems to be led by the orthodontia service class. While payments in the preventive, basic and prosthetic service classes actually increased 0.3 percent, orthodontia payments dropped a significant 8.8 percent. This trend is also reflected in the 7.0 percent decrease in the number of orthodontia procedures.

Looking at charges in the Dental Plan, the average charge per subscriber rose 4.8 percent--to \$423.29 from \$403.87 in 1996.

An average of 5.8 procedures were performed per subscriber, a decrease of 0.8 percent over 1996.

Enrollment in the self-insured Dental Plan increased to 205,979 in 1997 from 200,527 in 1996. (These enrollment figures do not include dependents covered by the Dental Plan.)

Total 1997 Plan payments increased 2.3 percent (a slightly lower pace than the 3.1 percent growth in 1996), with payments rising to \$40.5 million from \$39.6 million the previous year.

Total Plan charges increased to \$87.2 million from \$81.0 million in 1996--a 7.7 percent gain. The total number of procedures performed also increased in 1997, up 1.9 percent to 1,200,378 from the

1,177,821 in 1996. From 1995 to 1996, the number of procedures had increased 3.6 percent.

There are four classes of services

Class II services, which include basic dental services such as fillings and root canals, accounted for \$10.8 million in 1997 Dental Plan payments, a 1.2 percent increase from 1996 payments of \$10.7 million.

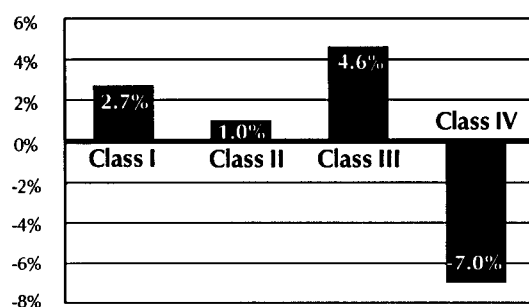
Total Class II charges for 1997 rose 7.4 percent to \$27.2 million from \$25.3 million in 1996. Class II procedures performed in 1997 increased 1.0 percent to 347,518 from 344,181 in 1996. The number of Class II procedures had increased 5.9 percent from 1995 to 1996.

The prosthetic services that comprise Class III include crowns, bridges and dentures. Payments in 1997 for these services came to \$8.7 million, a 6.3 percent increase from \$8.2 million in the previous year. Total Class III charges in 1997 increased 11.3 percent to \$26.8 million from \$24.0 million in 1996. The number of Class III procedures performed in 1997 grew 4.6 percent to 103,718 from 99,179 in

1996. The number of Class III services performed increased a comparable 4.2 percent from 1995 to 1996.

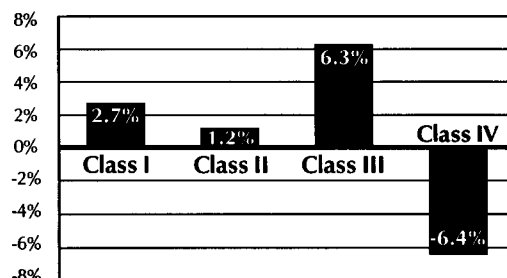
Class IV includes orthodontia, and benefits are limited to dependent children younger than 19 years old. Total payments for Class IV services were \$2.9 million in 1997, down 6.4 percent from the \$3.1 million paid in 1996. Total Class IV charges decreased 5.2 percent in

**Percentage Change in Procedures, 1996 to 1997<sup>1</sup>**



<sup>1</sup> Class I - preventive; Class II - basic; Class III - prosthetic; Class IV - orthodontia

**Percentage Change in Payments, 1996 to 1997<sup>1</sup>**



<sup>1</sup> Class I - preventive; Class II - basic; Class III - prosthetic; Class IV - orthodontia

within the Dental Plan, the first of which, Class I, consists of preventive dental services such as cleaning of the teeth. Payments for Class I services totaled \$18.1 million in 1997, up 2.7 percent from the \$17.6 million paid in 1996.

Class I total charges grew 8.2 percent last year to \$26.3 million, compared to \$24.3 million in 1996. The number of Class I procedures performed increased 2.7 percent in 1997 to 702,761 from 684,572 in the previous year.

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## 1997 Dental Claims

Continued from Page 7

1997 to \$6.9 million, down from \$7.3 million in the previous year. The number of Class IV procedures performed in 1997 decreased to 46,381, down 7.0 percent from 49,889 in 1996.

Statistics for Class IV procedures may not accurately reflect utilization of Class IV services because of limitations in both the age of those eligible for the benefit and the lifetime maximum of \$1,000 per person.

In Classes II and III, there is a \$25 annual individual deductible. This deductible accounted for \$2.85 million in 1997, a 1.8 percent decrease from \$2.80 million in 1996.

Total charges disallowed by the Dental Plan in 1997 came to \$29.1 million, up 20.2 percent from the previous year. Disallowed charges include contractual limitations such as charges greater than the fee schedule amounts and benefit maximums being reached. For example, the maximum benefit per person each benefit year is \$1,000.

Classes II, III and IV include subscriber coinsurance, which totaled \$14.4 million in 1997, up 2.5 percent

\$11.6 million in 1997. These individuals comprised 13.6 percent of the 205,979 Dental Plan con-

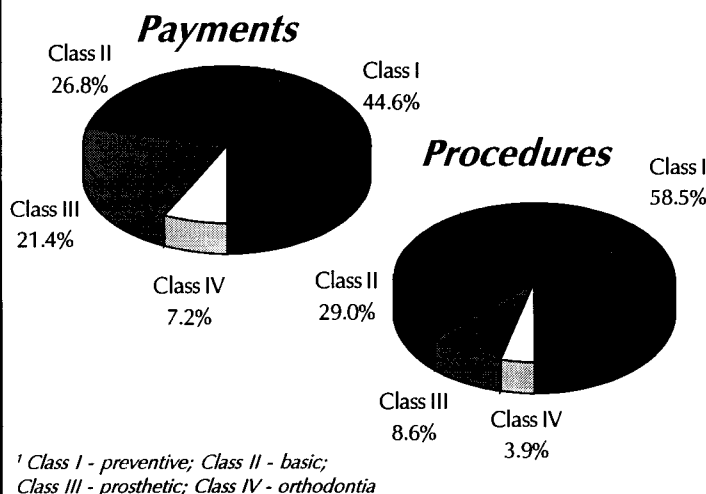
tracts. Individuals enrolled in full family coverage accounted for 29.9 percent of the procedures performed in 1997.

Dental Plan payments made in 1997 on behalf of individuals with subscriber/spouse coverage totaled \$7.7 million. This group made up 14.5 percent of the Dental Plan contracts and accounted for 17.9 percent of the dental procedures performed in 1997.

Individuals with subscriber/child coverage represented \$8.1 million in 1997 Dental Plan payments and comprised 14.5 percent of the Dental Plan contracts. These individuals accounted for 21.1 percent of the dental procedures performed in 1997.

Of the \$40.5 million in Dental Plan payments in 1997, 44.6 percent were for Class I services, 26.8 percent were for Class II, 21.4 percent were for Class III and 7.2 percent were for Class IV. ■

### Share of 1997 Dental Payments and Procedure by Class <sup>1</sup>



from \$14.0 million in 1996.

Dental Plan payments in 1997 made on behalf of individuals enrolled in subscriber-only coverage totaled \$13.0 million, up 4.7 percent from \$12.4 million in 1996. This group made up 57.5 percent of the 205,979 Dental Plan contracts. Subscriber-only contracts accounted for 31.1 percent of the procedures performed in 1997.

Payments on behalf of individuals enrolled in full family coverage totaled

## Dental Fee Schedule History

1985	Start of the program
1986-88	No increase
7/1/89, 1/1/90	21 common procedures in Classes I and II were increased 10% in two steps
1991	Except for the 21 procedures, the following increased: Class I--5%; Class II--10%; Class III--10%

1992	Class I increased to state mean charge; Classes II and III increased 6.7%
1993	Classes I and II increased by 3%; Class III increased by 10%
1994	Classes I, II and III increased by 3%
1995	Classes I, II and III increased by 3%
1996-98	No increase



# State Health Plan cardiovascular disease rates examined

With chronic cardiovascular diseases such as hypertension, arteriosclerosis and cardiomyopathy, lifestyle changes including exercise, smoking cessation and a healthy diet will help prevent the condition from worsening to a stage requiring hospitalization.

Individuals living with these chronic conditions need to understand how to monitor and control their conditions through periodic check-ups and proper use of medications.

In the U.S., an estimated 30 percent of people over the age of 50 are hypertensive. Although this condition is asymptomatic for the first 10 to 20 years, it slowly strains the heart and damages the arteries--which explains why it is often called "the silent killer."

Hypertension can be prevented or diagnosed through periodic blood pressure checks and lifestyle modifications--such as reducing sodium intake and maintaining normal weight and regular exercise patterns. Hypertensive patients should have regular medical examinations, comply with prescribed medical therapy, reduce other risk factors for cardiac disease and practice stress reduction and management techniques.

Prolonged hypertension is the major cause of heart failure, vascular disease, renal failure and stroke. Hypertension also affects the blood vessels, causing small tears in the innermost layer,

accelerating the process of arteriosclerosis.

Arteriosclerosis is a condition involving the thickening, hardening and loss of elasticity of the walls of arteries. Symptoms may include severe pain in calf muscles during

conducted the following study, examining demographic variables, emergency room encounters, inpatient admissions, office visits, prescriptions and total payments.

## Demographics

Within the State Health Plan, 13,189 individuals were reported with one of the following cardiovascular conditions in 1996: hypertension, cardiomyopathy and arteriosclerosis.

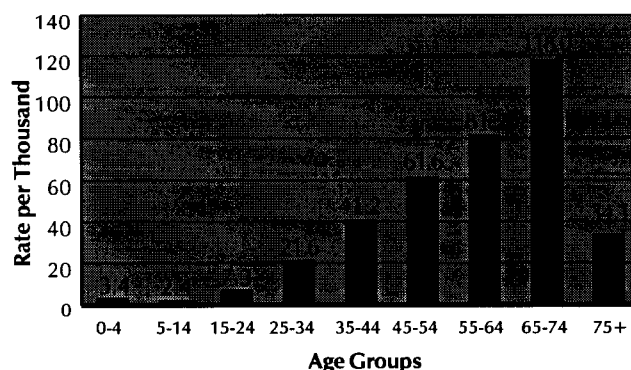
An algorithm that examines a combination of medical and drug line-items was used to classify SHP members with these cardiovascular conditions. Over a set period of time, each insured's claims experience

was examined for number of occurrences of medical and drug indicator codes, the time between events (generally measured in days), and the pattern of events (i.e., Extended Office Visit followed by certain tests and treatments). If the individual met the criteria, he or she was classified as having cardiovascular problems.

Looking at cardiovascular cases by sex, 8,427 were female and 4,763 were male. By age group, 45 were under age five; 110 were ages five to 14; 352 were 15-24; 743 were 25-34; 2,243 were 35-44; 3,806 were 45-54; 2,818 were 55-64; 2,466 were 65-74; and 607 were 75 years and over.

By looking at these numbers within the context of the State Health Plan's total population

**1996 State Health Plan Cardiovascular Disease Rates per Thousand by Age**



walking, changes in skin temperature, intensity of pulse, headache and dizziness. The rigidity of the blood vessels increases risk of heart attacks, strokes and aneurysms. Risk factors for arteriosclerosis include age, heredity, sedentary lifestyle, hypertension, high cholesterol, obesity, cigarette smoking, diabetes and stress.

Finally, cardiomyopathy is a term describing the inflammation of the cardiac muscle layer of the heart. Also known as myocarditis, this condition may weaken the heart and impair its ability to act as an effective pump. Symptoms include an irregular, weak pulse. This disease sometimes follows untreated streptococcal infections in children.

To understand more about these chronic cardiovascular conditions within the State Health Plan (SHP), the Office of Insurance Services

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## Cardiovascular

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(using a rate-per-thousand formula), it is possible to understand better the distribution of cardiovascular patients within the SHP.

Comparing total cardiovascular rate per thousand by sex indicates slightly more afflicted females than males--which is somewhat unexpected given the national trend of more males than females with cardiovascular disease. In the State Health Plan, females had a 43.7 per thousand incidence rate of cardiovascular conditions; males had a 34.6 rate.

By age, the 65-74 group had the highest rate, with 118.0 per thousand. The 55-64 group, with an incidence rate of 81.7, was the next highest, followed by the 45-54 group with 61.6 per thousand. The groups with the lowest incidence rates of cardiovascular conditions were 5-14, with 2.4 per thousand; 0-4, with 3.4 per thousand; and 15-24, with 7.3 per thousand.

### Emergency Room Encounters

Although only a small share of cardiovascular patients actually show up in emergency settings, these patients demonstrate the weaknesses in chronic disease management.

In 1996, there was a total of 1,336 emergency room (ER) visits by SHP cardiovascular patients. The majority of these visits (878) were made by females, while 458 of the visits were by males.

By comparing the rate of cardiovascular ER visits to the rate of visits by the total State Health Plan population, it is apparent that

these patients have a significantly higher rate of ER utilization than the general population. For 1996, cardiovascular patients had a 104.2 per thousand visits rate of ER utilization, while the total SHP population had just a 50.2 per

The wisdom of hospitalizing these patients is not questioned; however, by learning more about these cases, perhaps we can understand how to prevent the need for cardiovascular-related hospitalizations in the future.

In 1996, there was a total of 3,378 inpatient admissions for SHP cardiovascular patients.

Again comparing the cardiovascular population to the total State Health Plan population, we see these patients have a much higher rate of utilization. For 1996, the cardiovascular population had a 256.1 per thousand rate of inpatient admissions, while the total SHP population had a 89.0 per thousand rate.

### Office Visits

Unlike emergency room encounters and hospitalizations, the number of office visits is a positive indicator of successful cardiovascular management within a population. Routine visits to the doctor's office should be an important part of any cardiovascular patient's disease management.

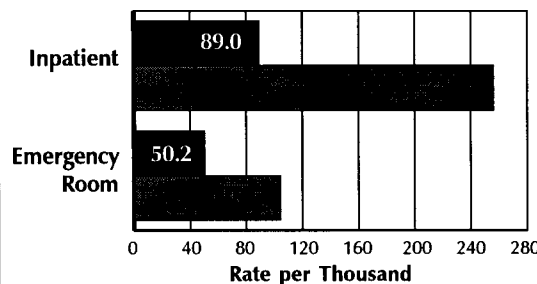
In 1996, there was a total of 215,106 office visits for SHP cardiovascular patients.

This time comparing visits *per person*, the cardiovascular population averaged 16.3 office visits per person during 1996, while members of the general SHP population averaged just 8.3 visits per person.

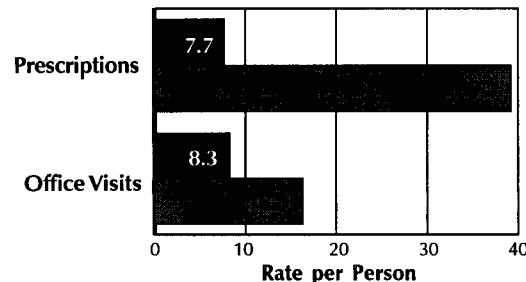
### Prescriptions

Like office visits, prescrip-

**1996 Utilization Rates by Total Plan Population, Cardiovascular Population**



**1996 Utilization Rates by Total Plan Population, Cardiovascular Population**



### LEGEND



thousand visits rate.

### Inpatient Admissions

The rate of inpatient hospital admissions is also a significant indicator of the health of cardiovascular patients.

Cardiovascular conditions usually can be managed effectively in an outpatient setting. With proper diagnosis, medication, equipment, education and access to outpatient care, these conditions should not result in hospitalization.

Continued on Page 11

## Women's Health

Continued from Page 2

times per week.

Examining the self-reported weight-bearing exercise information (exercise with a primarily *osteoporotic* benefit), 36 percent reported no weight-bearing exercise weekly, 35 percent report weight-bearing exercise at least one to two times per week and 29 percent reported weight-bearing exercise three or more times per week.

### Conclusion

The projected benefits of this kind of health management program include: improved medical care, reduced disease-specific events, decreased hospitalizations and medical resource utilization and improved member satisfaction.

The Partners for Women's

## Cardiovascular

Continued from Page 10

tions are also a positive indicator of well-managed cardiovascular conditions. In fact, use of prescription drugs is one of the most important ways a cardiovascular patient can control his or her condition.

A total of 517,542 prescriptions were reported for SHP cardiovascular patients in 1996.

Again looking at utilization *per person*, cardiovascular patients averaged 39.2 prescriptions during 1996, while members of the general population averaged just 7.7 prescriptions per person.

Given the large role that prescription drugs play in cardiovascular management, it is expected that these patients would have a much higher rate of prescription utilization than the general SHP population.

Some of the prescriptions used by cardiovascular patients include calcium channel blockers

Health Program is intended to support—not replace—a woman's health care provider during the menopause stage of life. Participants are encouraged to share all program information with their physicians.

The basic rationale behind this program is that quality of care and health outcomes can be improved by applying a targeted education and intervention approach throughout the continuum of menopause.

As the program progresses, additional analyses will be conducted, tracking the experience of participants as compared to non-participants. These analyses will enable us to examine the efficacy of this type of program on disease prevention and management. ■

(Procardia XL, Cardizem CD, Norvasc); antihypertensives (Accupril, Capoten, Vasotec); and antihyperlipidemics (Mevacor, Zocor, Pravachol).

Other drug types prescribed to cardiovascular patients include anticoagulants, beta andrenergic blocking agents, antianginals, diuretics and cardiac glycosides.

### Total Payments

In 1996, SHP cardiovascular patients incurred a total of \$49.6 million in payments. Looking at payments per person for 1996, the average was \$3,760, while the general SHP population average was just \$1,536 per person.

Of course, because cardiovascular patients tend to be more intensive users of the health care system than the general population, it is logical that their total payments would be higher than the SHP average. ■

## SHP Networks

Continued from Page 6

grouped charges). The MDCs with the next highest total charges were *Digestive* (\$0.6 million, 16.0 percent share), *Eye* (\$0.6 million, 15.8 percent share) and *Ear, Nose, Mouth & Throat* (\$0.5 million, 15.0 percent share).

### Prescription Drug Program

The prescription drug program, which was established January 1, 1995, is comprised of a network of pharmacies that have agreed to provide prescription drugs at discounted prices to SHP subscribers.

Of the \$99.1 million in retail charges for the 2.6 million prescription claims filed during 1997, 98.7 percent, or \$97.9 million, was incurred within the network. The Plan reimbursed \$85.4 million (including deductibles and coinsurance), or 86.1 percent of the total retail charges.

About a third of the 2.6 million prescriptions were generic (0.9 million), while the remaining 65.8 percent (1.7 million) were brand name drugs. The majority (1.5 million) of these brand-name drugs did not have generic equivalents. For the remaining 0.3 million, generic equivalents were available.

Now comparing brand-name to generic drugs by their share of prescription dollars, brand-names used 88.2 percent, while generics used 11.8 percent of the dollars. Of the brand-name drugs, those without a generic equivalent available used 77.4 percent of the dollars. Those brands with an available generic equivalent used 10.8 percent. ■

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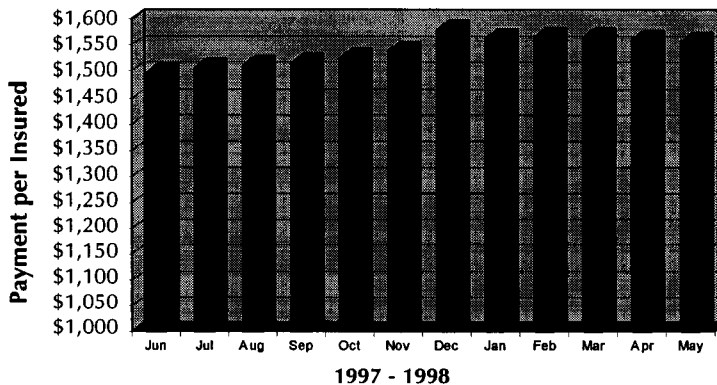
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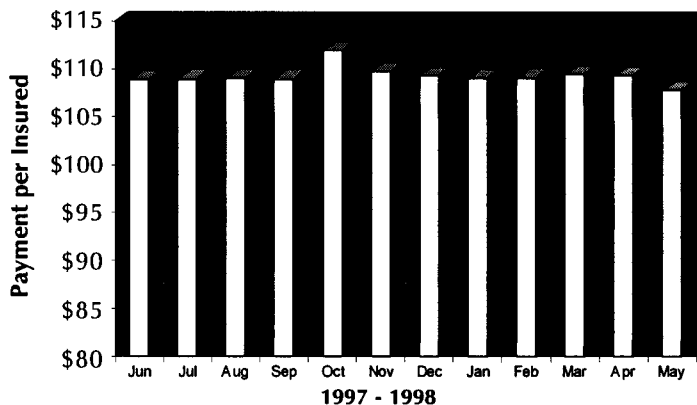
### Medical Payments in Prior Year Ending in Month Listed

*For example, the May total equals payments made June 1997 - May 1998.*



### Dental Payments in Prior Year Ending in Month Listed

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